

DOCUMENT RESUME

ED 104 157

FL 006 814

AUTHOR Nelson, Robert J.; Wood, Richard E.  
TITLE Radio in Foreign Language Education. CAL-ERIC/CLL  
INSTITUTION Series on Languages and Linguistics, No. 11.  
ERIC Clearinghouse on Languages and Linguistics,  
Arlington, Va.  
PUB DATE Apr 75  
NOTE 29p.; For related document, see ED 036 215  
EDRS PRICE MF-\$0.76 HC-\$1.95 PLUS POSTAGE  
DESCRIPTORS Educational Radio; English (Second Language);  
\*Instructional Aids; \*Language Instruction;  
Programming (Broadcast); \*Radio; Radio Technology;  
\*Second Language Learning; Teaching Methods

ABSTRACT

The present study is an updating of Robert J. Nelson's ERIC Focus Report No. 11 (1969) "Using Radio to Develop and Maintain Competence in a Foreign Language." Two major areas are examined: (1) the concepts behind the use of radio in language teaching and how this application of radio reflects changes in the theory and practice of foreign language learning in general; and (2) the technical aspects of application, regarding both equipment (receivers, antennas, etc.) and information on reception (changes in frequencies, conditions of reception, etc.). An extensive bibliography concludes the study. (Author/PNP)

RADIO IN FOREIGN LANGUAGE EDUCATION

Robert J. Nelson  
University of Illinois at Urbana-Champaign

Richard E. Wood  
Adelphi University

CAL-ERIC/CLL Series on Languages and Linguistics  
Number 11

U S DEPARTMENT OF HEALTH,  
EDUCATION & WELFARE  
NATIONAL INSTITUTE OF  
EDUCATION  
THIS DOCUMENT HAS BEEN REPRO-  
DUCED EXACTLY AS RECEIVED FROM  
THE PERSON OR ORGANIZATION ORIGIN-  
ATING IT. POINTS OF VIEW OR OPINIONS  
STATED DO NOT NECESSARILY REPRE-  
SENT OFFICIAL NATIONAL INSTITUTE OF  
EDUCATION POSITION OR POLICY

8/4  
8006  
8007  
ERIC Clearinghouse on Languages and Linguistics  
Center for Applied Linguistics  
1611 North Kent Street  
Arlington, Virginia 22209

April 1975

2/3

## RADIO IN FOREIGN LANGUAGE EDUCATION

The present study is an updating of Robert J. Nelson's ERIC Focus Report No. 11 (1969): "Using Radio to Develop and Maintain Competence in a Foreign Language."<sup>1</sup> Since the report appeared, the interest in radio in foreign language education, both in and out of the classroom, has grown considerably.

This growth has been twofold in nature: (1) in concepts of application, reflecting changes in the theory and practice of foreign language learning in general; and (2) in technical aspects of application, regarding both equipment (receivers, antennas, etc.) and information on reception (changes in frequencies, conditions of reception, etc.). In each of these areas there is a considerable amount of new literature, and we can no longer report, as Nelson did in 1969, that "the use of radio in foreign language training has been neglected." The bibliography at the end of this study is an indication of the growing attention to the field, and if we concentrate here on only a few of these contributions, it is only for reasons of economy and representative coverage.

### I

Language is a system of communication. Traditionally, foreign language education has concentrated more on the system than on the communication aspect. This emphasis even characterized "audiolingualism," the dominant method of teaching for the quarter of a century following the Second World War. Audiolingualism, it is true, shifted the goals of second-language acquisition from reading and writing to listening and, primarily, speaking, but the stress was on accuracy of performance (phonetic, morphological, syntactic) rather than expression (of ideas, feelings, attitudes, etc.). In terms of current theory, it prized linguistic competence over communicative competence, recognition over cognition. Methodologically, audiolingualism adopted behavioristic learning strategies: step-incremental pattern drill; sequential acquisition of the "four skills" (listening, then speaking, then reading, then writing); choral response; postponement of cognitive analysis. For the learner and, we suspect, for a great many teachers, the result was often a sense of separation between the "real" language (French, German, etc.) and the textbook language.

In this pedagogic setting, it is not surprising that radio failed to be adapted to foreign language instruction. Radio is essentially a creative system of technology; it is free, evanescent, oral-aural communication. In combination with other media (especially interpersonal communication: teacher to student, student to student, student to other speakers of the language, etc.), radio is ideally suited to teaching and learning strategies which posit communication not only as the goal but as the starting point of foreign language education.

We stress, in combination with other media. One of the socio-linguistic lessons of the past decade is that the learner acquires his competence in the foreign language from a variety of sources. No single setting (classroom, language laboratory, radio, etc.) accounts for the formation of communicative practices. Moreover, the typical radio broadcast, particularly via short wave, is not aimed at the student of a foreign language but at natural (usually native) speakers of the language. The speed of speech is normal, which can pose an obstacle for beginning language students, especially in the absence of the non-verbal, kinesic communicative cues which are so crucial a part of interpersonal linguistic exchange. Therefore, the authors believe that the principal occasions of learning at the beginning stages should be interpersonal. Nevertheless, we believe that radio should not be excluded from this stage of learning. Students will not only be exposed to it by chance; they may actively seek it out, particularly if broadcasts in the language are available and are being recommended for use in advanced and elective courses at their institutions (a point we shall elaborate later). In view of this sociolinguistic phenomenon, we therefore recommend that:

1. Beginning students should be alerted to the characteristics of typical, regular radio broadcasts. Differences in intonation can be sensed; differences in dialect or in personal style (speed of speech, syntax of expression, etc.) may also be noted. In addition, through recognition of major grammatical features (especially nouns), the student may also be able to determine what the broadcast is about in a general way. These linguistic and expressive "lessons" can be a source of great excitement and a stimulation to learning.
2. Teachers should (if at all possible) prepare for broadcast over local stations programs geared to the interests and communicative capacities of students at different stages, but without literally reproducing the interpersonal exchanges of the classroom. Such graded programs provide a body of material against which the student can measure himself for comprehension. We would also note the connection made by Simon Belasco between extensive early listening and speaking: "The day when

the average foreign language student overhears a conversation between two or more native speakers and has no difficulty in understanding what is being said is the day when he will be well on the way to developing linguistic competence."<sup>2</sup>

Hopeful as they are about these possibilities, the authors recognize the limitations on the use of radio at the beginning stages of language learning. Nevertheless, there have been significant efforts to use radio in teaching the early stages of the foreign language. Certain foreign countries (e.g., Sweden) have done so for years over their official shortwave facilities. In this country, Alan Garfinkel conducted an interesting experiment in teaching introductory Spanish via radio at Ohio State University in the late 1960s.<sup>3</sup> One of the present authors (Nelson) also used radio from the outset in learning Portuguese: In addition to studying the language through the Foreign Service Institute's course on tape (and through the tapescripts), he listened on a daily basis to the 15-minute broadcast of the news of the day presented in dictation rhythm (about 60 words a minute) in the Portuguese language by the Voice of America for listeners in Brazil.

The creative potential of radio comes into full play, naturally, at advanced stages of foreign language learning. Most advanced students find themselves in what is, from their point of view as practical users of the foreign language, an "alien" setting; that is, an American or English-speaking setting. Radio, particularly shortwave radio, can provide real models of the target language, thus enabling students to maintain and increase their communicative competence.

Perhaps more important is the capacity of radio broadcasts to expand the student's knowledge of the foreign culture. Broadcasts in the Western languages most commonly taught in the United States (French, Spanish, German, Russian) are available throughout most of the broadcast day either from countries where the language is native, or from elsewhere. For example, French from France is heard between 1500 Greenwich Mean Time (GMT) and 2015 GMT; French from Canada between 1900 and 2100 and again from 0200 to 0300 GMT over international shortwave frequencies and, after dark, in many parts of the Northern states, over regular AM broadcast bands; French from the Voice of America is beamed to Africa during the African evening (afternoon in the U.S.) between 1830 and 2230 GMT. Spanish from Mexico, Cuba and certain South American countries, particularly Ecuador, is concentrated in the American evening hours (2300-0500) but on the higher shortwave frequencies may be heard all day. Broadcasts from Mexico or Cuba may be heard at loud strength on conventional AM frequencies in large areas of the South and Southwest as well as along the entire East Coast. Spain itself has both morning and evening programs beamed to Hispanic America.

We should also note that in more than 50 American cities there are broadcasts in various foreign languages, intended for immigrants and American bilinguals. In many cities where foreign language groups have settled, television in those languages is marginal or nonexistent; radio, on the other hand, is the basic communications medium of the community. For example, in New York City there is little or no Yiddish television, but many hours daily of Yiddish radio; in Louisiana, the few Acadian French television programs are concentrated in the early morning hours, while radio programs in Acadian French (and standard or close-to-standard French--the latter produced in cooperation with the Council for the Development of French in Louisiana) may be heard during convenient daytime and evening listening hours.

A reasonably complete inventory of U.S. domestic AM and FM stations with foreign language programming can be found in the annual Broadcasting Yearbook, available in any major library; a more accurate list of Portuguese language stations is found in Richard E. Wood's article in Hispania.<sup>4</sup> The stations listed are of two main types: commercial stations serving American bilingual groups in areas of their settlement (e.g., French, chiefly in northern New England and Louisiana; Basque in Nevada and Idaho); and educational stations operated by universities or colleges. For example, 90 minutes of Portuguese, with excellent news items freshly recorded in Lisbon and flown in daily, make exciting daily listening on a high-powered FM station in Newark, New Jersey. In New York, WEVD-AM and FM, "the station that speaks your language," has excellent material daily in Hebrew, Japanese, and 20 other languages. On the East Coast and in the South, elementary Russian language lessons for speakers of Spanish may be heard on the Cuban AM domestic network, Radio Rebelde, at 590 and 600 kHz. They present touristic scenes and dialogues--Soviet tourists in Cuba, and Cubans in the USSR.

Of interest to the TESOL teacher will be the Voice of America's "Special English" broadcasts with an 800-word vocabulary and a slow, clear delivery. These are designed for students with only limited comprehension and for intelligibility under conditions of poor reception. An anthropologist<sup>5</sup> reports that the VoA Special English broadcasts are the principal source of Standard American English on an island where the governmental and educational language is Spanish but where the indigenous people speak an English-affiliated creole akin to Jamaican Creole English--San Andrés, Colombia. The Voice of America (U.S. Information Agency, Washington, D.C. 20547) sends listeners a list of the 800 lexical items upon request.

Table 1. Major Shortwave Broadcast Bands

Meter Band	Coverage in Kiloherz	Best Reception From:
49	5955-6195	Europe, northerly Latin America: evenings; all Latin America, Pacific, Asia: till dawn.
41	7105-7295	Europe, USSR: evenings; Pacific, Asia: till dawn.
31	9505-9770	Canada, Caribbean: daytime; Canada, all Latin America, Europe, Africa: late afternoon, evening till after midnight; Asia, Pacific: midnight till morning; Brazil: at dawn.
25	11705-11970	Europe: almost 24 hours daily on East Coast, summer evenings in West; Mexico, Cuba: all day; South America: evenings; Japan: dusk in winter; China: evenings in winter; Pacific: around and after midnight.
19	15105-15445	Europe: daytime and summer evenings everywhere; South America, Caribbean: all day; Pacific, Asia: evenings; Africa: afternoons, winter evenings.
16	17705-17895	Europe: mornings; Caribbean, Africa: early afternoons; Pacific, Asia: evenings.
13	21455-21745	Europe, Africa: mornings; Australia, Asia: summer evenings.

Coordinating foreign language broadcasts with classroom learning is, of course, one of the most important aspects of the question. Historically, radio programs have been used largely in connection with other electronic media, particularly the grooved disc and the tape recorder. In the early 1950s, William N. Felt was already using recordings of French radio broadcasts of news reports, interviews, touring information, time, book reviews, plays, songs, advertisements, theatre announcements, stock market reports, and quiz programs.<sup>6</sup> Such recordings are still available (on disc or tape) from the French and other governments, usually through an embassy's office of cultural services. However, an obvious disadvantage is that the materials are often dated, if not out-dated. More importantly, considering the present state of radio technology and the interest in overseas programming of the major

countries of the world, there is little need to rely on the limited recording resources of a given government's cultural services. Individual institutions or school systems can purchase reliable shortwave equipment (notably here, a receiver) either for direct listening or for making recordings for use later on.

Other technologies can also be linked to radio. Since 1970, the University of Illinois Department of French has provided on the telephone daily recordings of three- to seven-minute broadcasts of the news in French, courtesy of the French National Radio Service (Radio France). In addition, university students can make their own recordings of the news through the use of an inexpensive Telephone Pick-Up, a device attached to the ear piece of the telephone and plugged in to a tape recorder at the other end. (It should be stressed that the use of this "tapping process" was cleared with the University legal counsel.)

The Illinois service, with 12 telephone lines available day and night, has proven popular with the general campus community, with residents of major cities like Chicago, with French-speaking residents of the Middle West, and indeed, via long distance calls, with the entire nation.

Listening to radio broadcasts need not be merely ancillary in relation to the curriculum. At the University of Illinois, Professor Sandra J. Savignon adapted the daily news broadcasts in French as the main curriculum material for a conversation course at the elective level. Professor Savignon combined direct listening, recording and transcripts in her syllabus. Her experience contains lessons for the teacher as well as the student:

The most important and really all-inclusive contribution of France-Inter (the name of the French broadcast station) to developing the communicative skills of my students is that it brought lively, up-to-date French language and culture into the classroom, and students responded with an enthusiasm akin to the enthusiasm of an American Year Abroad Student who steps off the plane at Orly. This is for real. No more book phrases to be drilled and then inserted into a simulated exchange. Once the student is put in contact with the real thing, the teacher can step down from center stage. He is no longer master of ceremonies but coach, as the students, individually and as a group, work toward understanding and responding to this new presence.

In addition, Professor Savignon found that Radio France's descriptions of runaway teenagers and missing French youngsters, broadcast as bulletins along with other family and personal emergency messages generally at the end of France-Inter newscasts, struck a note of empathy and human interest among her students of similar age, and also provided useful vocabulary in the field of contemporary clothing and grooming.

Besides using the materials of foreign language broadcasts from outside, teachers and students can produce their own programs. Over the course of a semester, members of the class might prepare two or three 15-minute and one final half-hour program on subjects or events related to the target language and culture. For each of the shorter programs, students could take turns in serving as producer, researcher, script writer, and actor. The class could then determine who was best at which role and make assignments accordingly for the preparation of the final half-hour program. Any one of these programs could be aired over a local station. Models for this type of program already exist: "Hear It Now," and, over television, "See It Now."

Students who can send as well as receive foreign language shortwave transmissions have even further opportunity to expand their knowledge of the language and some aspects of the culture by conversing in the language with native speakers. This is especially true for American ham radio operators speaking Spanish, Portuguese, or French. (The rules for two-way radio transmission will be discussed in a subsequent section.) Working in radio either through production or via short wave can thus provide occasions for students to form a community of radio buffs, giving a still greater sense of solidarity and belonging with respect to the foreign language and culture. Beyond their school years, involvement in this aspect of the foreign culture can also provide career opportunities in broadcasting or radio-related fields.

Although techniques of recording and delayed utilization of shortwave broadcasts are available, these place intermediate steps between the authentic, live medium and the student. The demonstration of a live broadcast coming in from the country of origin should serve to convince the skeptical student--who may have viewed the foreign language as something belonging in textbooks, on language laboratory tapes, or in the mouth of the instructor--that there are real speakers beyond the walls of the school, using their own language with perfect ease and naturalness to convey vital, contemporary information. The language, presented in this light, is a code that the student may be tempted to break.

The availability of live programming at acceptable strength, clarity, and freedom from interference and noise at any given time and place depends upon the variables of geography, time zones, propagational conditions--including the regular diurnal and seasonal variations and the vagaries of the sunspot count--and on other more local factors such as receiving equipment, construction of an efficient antenna, freedom from local man-made noise, and the operator's experience with his receiver and knowledge of where to look for optimal reception. But it is remarkable what can be done. Michel and Janice Monnot, for example, in their

description of a second-year French program in France, describe the creative utilization of live reception of the French Radio by their students in Pau:

Our contention was that if listening to the French radio was done in a cogent manner, listening comprehension would decouple in a very short time, and speaking ability would soon follow suit.

Students, who were required to own a good cassette tape-recorder, were then directed to listen to and tape the daily news summary, every morning at 9:00 a.m. on France-Inter. Listening and taping the subsequent news editorial of Jean Grandmougin was encouraged but optional. The news summary itself lasted two minutes, but was amply sufficient to present a wide range of subjects, to offer frustrating decoding challenges, and to plunge our participants directly into the intricacies of French politics.<sup>8</sup>

Readers are encouraged to refer to the original report by the Monnots and to note the integration of the radio element within the total learning experience. In the United States, the France-Inter news summary and editorial could be similarly utilized, since the same newscast is heard in this country. The France-Inter news may be received in the classroom live at 1500 GMT (10:00 a.m., EST) and again at 1600, 1700, etc.

Broadcasts in several languages can be taped daily in the language laboratory for classroom replay throughout the day. Radio France news can be recorded at 8:00 a.m. EST (1300 GMT) and the North American transmission of the Deutsche Welle, Cologne, at 1330 GMT. News from Radio Nacional de Espana, Madrid, is available in the same time segment. The Deutsche Welle program, used in its entirety, offers news, political commentary, gemütlich musical selections, and a review of the West German press. The tone of the broadcasts is usually rather light-hearted and humorous, designed for morning listeners in the American target area.

The principal content of international shortwave broadcasting is news and news-related material, such as political commentaries, reports from foreign correspondents and press reviews. Due, among other things, to propagation conditions and low audio fidelity, not as much music is played as on American domestic radio. While the BBC presents lengthy dramas by classical and contemporary authors, most dramatic material heard on short wave is of brief duration and appropriate for use with students with limited attention span. Moreover, the more sophisticated polyglot stations such as Radio Nederland base the duration, as well as the content, of their program features upon attention factors determined by cultural anthropologists. Radio Nederland's English service presents very brief features interspersed with music;

its "Dutch by Radio" series presented in English includes rousing music between every few sentences, the spoken word lasting seldom more than two minutes. On the other hand, its Arabic service offers lengthy, continuous orations in Arabic to suit the listening habits of a people for whom the spoken word is a never-ending delight. Similarly, in Spanish speeches of marathon duration by Fidel Castro may be heard over Radio Havana, although less frequently than a decade ago.

It is worth pointing out that the reasonably aware, mature student (and especially the adult learner) will be able to infer much of the meaning of news stories from recognition of names of major political figures and countries as well as from his familiarity with current events. Moreover, most international shortwave stations broadcast in a multitude of different languages (about 40 each for the BBC and Voice of America, for example), so that the same or a similar news broadcast can be heard successively in more than one language. Radio Japan, for example, presents English news on the hour around the clock, followed by a Japanese version of the same bulletin. The student of Japanese could listen to the English news at, say, 1900 GMT (11:00 a.m., PST) in preparation for the Japanese version at 1915, then hear both again, only slightly updated, at 2000 and 2015 GMT.

In keeping with the Canadian government's policy of developing bilingualism, Radio Canada International has recently introduced two hours of alternating 20-minute news programs in English and French, beginning at 0530 GMT (11:30 p.m., CST). The CBC Northern Service, beamed to the Arctic but well audible even in the South, and the Armed Forces Service beamed to Europe both carry the same material that domestic CBC audiences in Canada hear on AM. Again, English and French are heard in rapid alternation--first the English news, then "Le Monde ce matin" or "Le Monde ce soir."<sup>9</sup> The sports news in French might be suitable for beginning classes, especially for phonetics, including as it does familiar North American place names, team names, and the names of well-known sports stars, all in French pronunciation, as well as the basic numerals. Even the bilingual CHU time signal is useful: it teaches the phrase "Heure normale de l'Est" and the numerals used in time-telling and provides an insight into the functioning of a bilingual country. CHU Ottawa is best on 7335 kHz (during evening hours, and daytime in the East) and on 14670 kHz (daytime, and evenings in the West).

Speaking of Canada, we may recommend the baseball, Canadian football, and hockey games heard on the Northern Service on short wave (after dark in the northern Middle West and throughout the East) and on AM 860 kHz (CJBC Toronto); in New England and New York on AM 690 kHz (CBF Montréal); and over a variety of Québec commercial stations such as CKLM (1570 kHz) and CKAC (730 kHz)--both in Montréal--or CJRS (1510 kHz) in Sherbrooke. These commercial stations are a convincing demonstration that the North American way of life

is lived in French as well as in English. The frequencies are Canadian clear channels under the North American Regional Broadcasting Agreement and cover large areas of the United States.

In the West, far from Québec, CKSB Saint-Boniface, Manitoba (1050 kHz) provides French after dusk throughout a vast area of the Dakotas and other northwesterly Midwestern states. CBEF Windsor (540 kHz) covers the Detroit-Toledo area and much of Michigan in daylight. Also in daylight, CJBC Toronto (860 kHz) crosses Lakes Ontario and Erie to Buffalo, Cleveland, and other U.S. cities. West Coast listeners north of Seattle can enjoy the Montréal-produced programs of CBUF-FM, 97.7 MHz in Vancouver.

## II

### Selecting equipment

The language teacher is more often than not a humanist trained in books and words, not in mechanics or physics. Despite over 20 years of general use of the language laboratory, the average foreign language teacher (though there are outstanding exceptions) may still not feel competent to select, install or operate such equipment as the shortwave receiver and antenna. In fact, the equipment is less complex than the average television set and antenna, and its design and operation have changed less in the last 20 years than have the language laboratory, recording and audio equipment, and other technologies. The following section is designed to aid the foreign language teacher inasmuch as the authors have observed--in schools and universities in many parts of the United States--valuable and useful shortwave receiving equipment gathering dust in language laboratories and lounges for trivial reasons such as the accidental disconnection of an antenna, the flipping of a "stand-by" switch, failure to understand the controls, or even the misapprehension that a government license is required to operate receiving equipment (it is, indeed, required to transmit, except for certain low-powered walkie-talkies).

### The receiver

The choice of a receiver is an important one and an investment that, if wisely made, will not be regretted, as a good shortwave receiver retains a high resale value over many decades. Moreover, the technology of shortwave broadcasting and reception has not greatly changed. Transmission is still, as it was in the 1920s, in amplitude modulation (AM), and the listener desiring AM reception therefore has no need for single sideband (SSB) capability, the beat-frequency oscillator (BFO) and associated equipment, although these are found on most of the receivers mentioned below. Other devices designed to improve reception under

marginal conditions, such as notch filters and various audio devices, are not necessary for the foreign language teacher, as there is a minimal standard of clarity and intelligibility below which signals are useless for language-learning purposes.

Many successful users of short wave in foreign language teaching employ equipment designed and manufactured in the 1940s and early fifties, or even earlier. In some ways the better equipment of the 1950s represents an ideal combination of sturdiness, components built to last (built to military specifications or civilian adaptations thereof), and what the shortwave broadcast listener is seeking: (1) general coverage of the entire shortwave range (usually, 3 MHz to 30 MHz); (2) good sensitivity and selectivity; and (3) design standards engineered for the medium (amplitude modulation of voice signals) rather than SSB or non-broadcast, even non-speech, transmissions.

Such general-coverage communications receivers as the Hammarlund HQ-180A and the R-388 and its modifications, the R-390 and R-390A, are fine, solidly built, non-portable receivers (indeed, the R-388 series is anything but portable!) no longer produced but obtainable on the surplus market. Many of these have been in the hands of technically qualified radio amateurs, and they have doubtless been well maintained. Military equipment, built to rigid specifications and often sold complete with very generous supplies of spare parts, is often available on the surplus market at a fraction of the original cost. Some military equipment can be used as is. Other receivers, designed for mobile or portable use, must be adapted to standard home electric sources. General surplus stores and amateur radio stores are the best sources. Take along a qualified friend and buy carefully to avoid an expensive "white elephant."

Newer and somewhat more expensive are transistorized communications receivers covering a selected range of bands. These may be programmed to receive the desired shortwave broadcast bands by the installation of a crystal for each. They are not general-coverage receivers. Unfortunately, few general-coverage communications receivers are made today. Examples of crystal-equipped receivers include the Drake series and the Japanese Yaesu. The Drakes bear such model numbers as SW4A, R-4B, R-4C and SPR-4. Some Collins and National receivers also belong in this category.

Cheaper than the communications receiver is the communications-type receiver, with general coverage of the shortwave bands in two or three ranges, perhaps 2-5 MHz, 5-12 MHz and 12-30 MHz. On such receivers, a station-loaded band such as 19 meters (15.1 to 15.45 MHz) may cover only a fraction of an inch on the dial. The disadvantage is obvious--a slight turn of the tuning knob will pass through dozens of stations, all in close proximity on the dial. Their exact frequencies are undeterminable and hence their

identity dubious unless a spoken identification or familiar musical interval signal is heard.

Many portables and the cheaper communications-type receivers suffer from warm-up drift. This problem can be solved by switching the tube-type receiver on 15 minutes before it is needed, or, preferably, by keeping it permanently switched on. This may seem wasteful of electricity, but the waste is counterbalanced by the savings on tubes and other components which are damaged by temperature changes and by the surge of electricity at initial switch-on. When not in use, the receiver may be kept tuned to the desired station and the volume and other settings maintained, but the function switch flipped to the "stand-by" position. (Sometimes, e.g., on Hammarlunds, the position is labeled "send," but it does not, of course, turn what is only a receiver into a transmitter.)

The foreign language teacher using the radio medium is probably not intrinsically interested in establishing rules-of-thumb for locating stations. If he can tune directly to a frequency announced on the air or listed in a printed schedule or in the World Radio and Television Handbook, he will avoid frustrating searching, uncertainty and guessing as to a station's identity. For more information about receiver selection, the reader is referred to such sources as the receiver sampler in the annual Popular Electronics Communications Handbook, the shortwave listening section of which is written by one of the present authors (Wood); the catalogues of specialized shortwave listening (SWL) equipment suppliers and manufacturers; personal and local sources, such as qualified radio amateurs, some language laboratory directors, or physics or electrical engineering departments of colleges or universities; or free leaflets on receiver selection obtainable from some of the major world stations, such as Radio Nederland, Hilversum, and the BBC, London.

#### Antenna

A simple long-wire T, L, or inverted L antenna can be stretched between the school building and a nearby tree, another building, a flagpole, etc. The above sources (stations, amateurs, the Communications Handbook, etc.) can provide information. An external antenna is always advisable, and it is a necessity when the building is steel-framed. The antenna should be as high as possible and placed away from electric motors, auto ignition systems, and other sources of man-made noise. A coaxial lead-in from a rooftop antenna can be fed to the receiver indoors.<sup>10</sup> The wire should be wind-resistant, with some play, and should be positioned so that it will not hit high-tension wires, either through sway or if it should break. It should be equipped with lightning insulators.

Many books on simple antennas may be purchased at any electronics store. Special indoor antennas are manufactured for those instances in which a listener is prevented (e.g., by zoning laws) from building an external antenna, but this should seldom be the case on school property. Extremely high antennas may be restricted in the vicinity of airports.

#### Placement of receiver

The receiver should not be placed in proximity to electrical noise sources nor, because of the effect of sweep harmonics, near an operating television set. Motor-generated noise carries further than television sweep, though sweep harmonics from a poorly shielded color set may be troublesome. At the very least, the SW set and TV should not be plugged into the same electrical outlet. In schools, there are three main choices: in the language laboratory, the lounge and the classroom.

Language laboratory. Communications receivers come, optionally, in rack-mounting models. The rack location selected should be at convenient height for operation of the controls and for accurate read-off of the dial. This may mean an eye-level mounting, whether for a standing or sitting operator. A shortwave receiver is not like a TV set, which can be instantly flipped from one preset channel to another. It requires careful tuning and a period of selection between several parallel frequencies in simultaneous use to find the optimal channel for a given multi-frequency station (e.g., while Radio Moscow operates to North America on an average of a dozen different frequencies at any given time, only two or three will provide loud, interference-free reception).

In the laboratory, the receiver should not be placed in a crowded corridor, nor where its sound, if the loudspeaker is used, could disturb students at the booths. It should preferably be placed at eye level above and behind a desk, on which the World Radio & TV Handbook and a selection of the printed schedules of the main international broadcasters, sent free upon request, may be placed. The following stations, for example, were kind enough to send multiple copies of their program schedules for distribution at a recent session on "The Use of Radio in Language Teaching" at an annual meeting of ACTFL: Radio Australia, Melbourne; Radio Moscow; Radio RSA, Johannesburg; and Radio Sweden, Stockholm. Others providing free material on language teaching by radio were BBC, London; Belgian Radio and Television, Brussels; Radio Japan, Tokyo; and Radio Nederland, Hilversum.

Lounge. Some foreign language departments are fortunate enough to have a coffee lounge where printed materials and cultural artifacts are displayed. A shortwave receiver may be added, if its security can be assured; rack mounting might thus again be advisable. Although the atmosphere in the lounge should not be one of formalized learning, the pleasant musical background of Radio Havana or of a Mexican commercial shortwave station such as XERH, Mexico City, seems more appropriate than piped-in Muzak. Language clubs meeting in the lounge might wish to find a station to their taste and might enjoy entering the stations' prize competitions, etc. Headphones may be provided, there and in the laboratory, for individual use to avoid disturbing others.

Classroom. The problem of security and maintenance of an expensive piece of fairly delicate equipment may limit choices as to the placement and handling of the receiver, but these disadvantages are outweighed by the authenticity and directness of the classroom placement of a receiver, or, at the least, of a loud-speaker fed in from the language lab. A good speaker is a necessity, and the acoustics of a bare-walled, high-ceilinged classroom may pose problems. If a wall-jack connecting with an outdoor antenna is provided, the receiver can be moved from room to room as required. Caution is advised, however. Although a good receiver may continue to operate after being dropped or jarred, its dial will most probably be out of alignment and need to be reset by a professional.

Operation. Tuning should be steady and smooth. It should be done slowly and accurately within the band most likely to provide good reception from the desired station. The 19 meter band, for example, is a likely source of European stations in daylight, but at night will most likely provide signals from Tahiti and Australia (both partly in French). The listener will soon learn not to waste time between broadcast bands, where a mass of non-broadcast and generally non-voice signals is heard, but will concentrate on the narrow but intensely productive broadcast (SWBC) bands. If provided, controls, such as BFO, notch filter, single sideband selection, calibrator, etc., should be in "off" position. The automatic volume control (AVC) should, however, be switched on when tuning around the dial. If a choice of AVC speeds is given, select the "medium" or "fast" position. Once a desired signal has been located, if it appears to be reasonably stable and is not close to an overwhelmingly loud, undesired station, the AVC may experimentally be switched off, at which time, if the signal is loud, the radio frequency (r.f.) gain control will probably have to be turned down part way. In general, if the AVC is on, the r.f. gain may on most receivers be left at its maximum position while the audio frequency (a.f.) or volume control alone is used. Without AVC, a combination of a.f. and r.f. settings will have to be used. A simple table-model or portable set may only have one gain control and may have no AVC.

Table 2. Major Languages in International Shortwave Radio

Language	Number of Stations*
Arabic	57
Chinese	27
English	93
French	66
German	42
Italian	24
Portuguese	36
Rumanian	19
Russian	36
Spanish	47
Swahili	19
Turkish	19

\*A station is defined as an administrative unit, e.g., Voice of America, Deutsche Welle. It may have many different transmitter sites around the world.

Do not expect to find the same station on the same frequency at all times of the day or year. Look for Europe, for example, on 16 meters in the morning, 25 in the afternoon, 49 in the evening. International SWBC stations do not use fixed frequencies but, rather, change them up to four times annually, on the first Sunday in March, May, September, and November. Stations in lower latitudes, e.g., Portugal and Spain, need make fewer changes than those in high latitudes, e.g., Sweden and Japan, broadcasting to North America. For more background to this the reader is referred to a book by one of the present authors<sup>11</sup> and to the several editions of a handbook devoted to shortwave listening.<sup>12</sup>

#### Language lessons on SWBC

The approach of the major governmental shortwave stations toward language teaching varies. As a general rule, the message of the major powers (USA, USSR, China) is political, rather than cultural-linguistic. They do not devote much attention to the formal teaching of their national languages, although all three run

occasional language courses for listeners in certain countries. At this time, for example, Radio Moscow broadcasts "Russian by Radio" to the British Isles, but not to North America; the Voice of America teaches English in Thai and Arabic; and no Chinese lessons have been heard on Radio Peking since the Cultural Revolution.

Other countries, on the other hand, do much language teaching. The BBC, for example, and Radio Australia are much more involved with English teaching than the Voice of America. Most bilingual or multilingual countries where there is some degree of linguistic controversy, e.g., Canada, Switzerland, Finland, India, do not provide shortwave language lessons, but South Africa does, teaching Afrikaans and leaving the teaching of English to the BBC's English by Radio and Television unit.<sup>13</sup>

Particular attention is paid to language teaching via this medium by the nations speaking Germanic languages akin to English--Swedish, Dutch and Afrikaans. The three stations send free course booklets to overseas students and will correct and return homework assigned at the end of each lesson, if the student airmails it to the station. Radio RSA, Johannesburg, is particularly helpful in this regard. Radio Sweden also distributes a series of phonograph records correlated with "Swedish by Radio." Radio Japan, too, has "Japanese by Radio" with accompanying booklets. Though beamed to both coasts of the U.S., reception in the East, as of this writing, is too inconsistent to permit real course participation, but in the West reception is generally excellent. Radio Prague is reportedly awaiting an improvement in the sunspot cycle (circa 1978), permitting the year-round utilization of higher frequencies such as Prague's traditional 11990 kHz channel, before initiating another series of "Czech by Radio." Generous prizes are offered by Radio Prague for successful participation in the course.

The general tone of the language-by-radio broadcasts of most stations is conversational and cultural, and the programs are presented in such a way that listeners who are not taking the course will still find something of interest and will not tune out. The BBC's TESOL service, on the other hand, offers much more specialized coverage including business English and sessions devoted to answering listeners' questions on grammar and usage (in English or in the listener's own language).<sup>14</sup>

#### Amateur radio

Ham radio began in the United States, and the majority of the world's amateurs are still in this country; the hobby is also very popular in Japan and the Soviet Union. It is estimated that 90 percent of ham contacts are made in English or, more precisely, in a stereotyped, limited jargon which bears some historical relationship to English. Ham contacts would be all the more welcomed

abroad, if, under these circumstances, capable American linguists and foreign language classes were to take to the amateur airwaves, where they are not much in evidence at the moment. They would probably be welcomed most of all by the amateurs of Latin America, who tend to be more educated than the average American radio amateur. Latin American amateurs would certainly welcome an opportunity to converse in Spanish and Portuguese, and their usage would be close to the national standard in those languages. French, too, can be utilized, not only in talking to France and Canada, but to the francophone African nations (where the amateurs are generally expatriates, missionaries, etc.) and French outposts in the West Indies, the Pacific, and the Indian Ocean.

A certain amount of chess is played by amateur radio, and this could be done in a foreign language, too. American amateurs have the freedom to transmit in any language of their choosing, provided identification is made in English every ten minutes and at the beginning and end of every contact. This compares favorably with the regulations in Switzerland, for example, where only the four national languages (German, French, Italian, and Romansch), English, and Spanish are permitted.

It is easier for the non-amateur to use the facilities of an American amateur station than those of most European and Afro-Asian countries. For example, "third-party" communications are permitted only between the U.S. and most nations of the Americas, Liberia, and Israel, but not with Britain, France, and other countries where telecommunications are a government monopoly. Thus, a licensed American amateur (e.g., a teacher) could permit guests such as his students to speak over his microphone to amateurs or other guests in Ecuador or Brazil, provided he controlled the equipment and logged their names. The required station and operator's licenses, the latter available upon successful completion of several stages of examination, are issued by the Federal Communications Commission.<sup>15</sup>

It should be noted that broadcasting via amateur radio stations is strictly prohibited; music may not be played, nor material designed for general audiences. Except in emergencies, content is limited to technical matters, amateur radio projects, and matters relating to the operators' friends or families. Transmissions are monitored by the FCC and equivalent bodies in other countries. Political topics are not permitted. The use of a foreign language in amateur transmission is more likely to be of intrinsic value as language practice in a "real" setting and in establishing personal relationships than for the acquisition of cultural or political knowledge about the country contacted. Geography and weather terms may be acquired, and national and regional variations of the target language noted as, for instance, in the Spanish word for "over," terminating a contact.

Several U.S. schools operate "club" radio amateur stations. Local hams are usually willing to aid in setting up such a station, invite novices on field trips, and generally propagate their hobby. Inexpensive surplus equipment for amateur transmission is available; involving the least expense are equipment that the amateur rebuilds or reconditions himself and perfectly serviceable, though large, tube-type transmitters that have been somewhat outdated by the introduction of miniaturized transistors and semi-conductors. The beginner would be well advised to begin with a kit, for construction practice. Large, expensive, powerful station "packages" can be bought intact, but without practice in construction, a would-be amateur might fail the requisite FCC examination. It is advisable to obtain the license (good for five years) before the equipment.

By international regulation, knowledge of the Morse code is a requirement--five words per minute sending and receiving--for the novice license, which may be held for two years, and 13 words per minute for the general class, which is the minimum necessary for voice operation on those bands likely to permit communication with foreign countries. Canadians have a slightly different requirement. There are certain parallel skills involved in second-language learning and in the internalization of the International Morse Code. Using code, even the novice may transmit world wide on certain bands in any language--or, more precisely, in the Morse surrogate of any language. We conclude this brief introduction to amateur radio by mentioning that in the United States, American citizenship is no longer a necessity for such operation. There are no age limits in amateur radio. Assistance in getting a radio amateur license can be obtained from ARRL.<sup>16</sup>

#### Teletype operation

All the radio signals discussed above are evanescent in nature. One intriguing type of radio transmission which leaves a permanent record is the teleprinter. Certain amateurs communicate with each other, not in voice or code, but in print. Also, shortwave listeners with their own teleprinter unit may receive, in particular, the press releases of the world's news agencies, including TASS (Soviet Union), Prensa Latina (Cuba), New China News Agency (Peking), Agence France Press, Reuters (London), Deutsche Presse-Agentur, Korean Central News Agency (Pyongyang), and dozens of others. This reception is legal in the United States, provided it is not divulged to third parties or used for commercial purposes. Such receiving stations must be fed with rolls of paper and consist of a teletype unit (not necessarily equipped with keys, if no transmission is undertaken) attached via a converter box to a shortwave receiver as described above. They bear a strong resemblance to the newsroom equipment of a radio station. As new equipment is prohibitively expensive, reconditioned machines, generally from Western Union, must be

purchased. The cost is not great, but some expertise is needed, particularly in selection of the best of the several speed standards in common use (66 words per minute, 75, 100, etc.). Like the shortwave broadcasts mentioned earlier, many teletype transmissions are beamed to the United States. English, French, Spanish, and Russian are the dominant languages.

### Organizations

One noted advance since the appearance of Nelson's 1969 report is the formation and consolidation of the Language by Radio Interest Group, an informal affiliate of ACTFL. At this writing, its membership has expanded to over 300 language teachers and interested persons in many countries at all levels of the educational system. Their interests cover not merely shortwave radio or radio listening but the production of foreign language radio programs, educational broadcasting, FM radio, slow-scan television, language by telephone, and other electronic media. Sessions on the application of radio techniques to foreign language teaching have been held at ACTFL conventions, attracting large audiences. Those interested may contact Language by Radio Interest Group, c/o Professor Robert J. Nelson, Department of French, University of Illinois, Urbana, Illinois 61801. The group's mimeographed newsletter provides news of this expanding and exciting field and carries additions to the rapidly growing bibliography. It is available at no cost to interested readers. Back issues are entered into the ERIC system. Radio-interest sections could also be formed within AATF (where there has been much activity and pioneering work in recent years), AATSP, AATG, AATI, AATSEEL, and other associations.

NOTES

1. Robert J. Nelson, Using radio to develop and maintain competence in a foreign language, ERIC Focus Report No. 11 (New York: MLA/ERIC Clearinghouse on the Teaching of Foreign Languages, 1969). Available from MLA/ACTFL Materials Center, 62 Fifth Ave., New York, New York 10011. \$0.25.
2. Simon Belasco, Surface structure and deep structure in English, Midway, 8:2 (1967), 112.
3. Alan Garfinkel, The Effects of an Enrichment-Oriented Radio Program on Measures of Listening Comprehension and Student Attitude Made in Level II High School Spanish Courses (unpublished Ph.D. dissertation, Ohio State University, 1969).
4. Richard E. Wood, Shortwave radio as a teaching aid for Portuguese, Hispania, 52:1 (1974), 58-63.
5. Jay D. Edwards (Louisiana State University), personal communication to Richard E. Wood.
6. William N. Felt, The adaptation of radio to foreign language teaching, French Review, 26 (1953), 432-438; and: Radio and the foreign language laboratory, French Review, 34 (1961), 562-566.
7. Sandra J. Savignon, A l'écoute de France-Inter: The use of radio in a student-centered oral French class, French Review, 46 (1972), 330-341.
8. Michel Monnot and Janice Monnot, Second-year French: The Carleton-Pau experiment, French Review, 47 (1974), 368-376.
9. The utilization of this same program is reported upon favorably by D. H. Jory, Canadian French-language news tapes in the classroom, French Review, 48 (1974), 141-143.
10. Successful use of this technique is reported by LeRoy R. Shelton, Shortwave radio in teaching, Hispania, 57 (1974), 910.
11. Richard E. Wood, Shortwave Voices of the World (Park Ridge, New Jersey: Gilfer Associates, 1969). Available from Gilfer Associates, Box 239, Park Ridge, New Jersey 07656. \$3.95.

12. How to Listen to the World. Published biannually, eight editions to date. Available from the publisher: World Radio & TV Handbook, Box 88, DK-2650 Hvidovre, Denmark; or from Gilfer Associates (see above entry).
13. See: The biggest schoolmaster, pp. 106-108, and the rather bizarre article, Learning English by pop, pp. 109-111, in: How to Listen to the World, 8th ed., 1974. For general information on BBC, including English by radio and television, see: BBC Yearbook (London: BBC, annual).
14. For a general discussion of language by radio designed for the DX radio listener rather than the language teacher, see Richard E. Wood, Learning languages by radio, in: How to Listen to the World, 7th ed., 1972, pp. 94-97.
15. Federal Communications Commission, Washington, D.C. 20554.
16. The unofficial body uniting a majority of the radio amateurs in the U.S. is the American Radio Relay League, 225 Main Street, Newington, Connecticut 06111.

## BIBLIOGRAPHY

Allen, Edward D., and Rebecca M. Valette. Modern Language Classroom Techniques: A Handbook. New York: Harcourt Brace Jovanovich, 1972. See especially p. 17.

Becher, Alfried W. Keys: New and used. American Foreign Language Teacher, Spring 1973, 4-6.

Behrens, Ernst. Deutsch als Fremdsprache in Radio und Fernsehen [German as a foreign language in radio and television]. Zielsprache Deutsch, 1 (1970), 42-45.

Bowman, James. Shortwave monitoring at Bolívar House. Hispania, 47:4 (1964), 795-796.

Boyd, Margery M., and David E. Wolfe. The effect of radio on motivating a fourth-year German class. Die Unterrichtspraxis, 6:1 (1973), 118-120.

Broadcasting Stations of the World, Parts I-IV. Washington, D.C.: Foreign Broadcast Information Service. (Published biannually.)

Broadcasting Yearbook. Washington, D.C.: Broadcasting Publications Inc. (Published annually. Available from 1735 DeSales St., Washington, D.C. 20036, approximately \$17.50.)

Brown, J. I. How teachable is listening? Educational Research Bulletin, 33 (1954), 85-93.

Burnell, Jerrold B. How shortwave radics can improve teaching effectiveness. Educational Technology (Teacher and Technology Supplement), 11:10 (1971), 60-61.

Carroll, James K. Broadcasting in foreign language instruction: Sweden--a possible model. Educational Broadcasting, 4:9 (1971), 19-22, 41.

Cook, H. Robert. The Effects on Learning of Structural Drills in Spanish Broadcast via High Frequency AM Radio. Bloomington, Indiana: Indiana University Foundation, 1964. ERIC ED 003 193

Foreign Radio Amateur Callbook Magazine. Lake Bluff, Illinois. (Published biannually. Obtainable from all amateur radio stores or 925 Sherwood Drive, Lake Bluff, Illinois 60044.)

Garfinkel, Alan. Teaching languages by radio: A review of resources. Modern Language Journal, 56:3 (1972), 159-163.

Hertzberg, Robert. So You Want to Be a Ham. Indianapolis:  
Howard W. Sams, Inc.

Hill, Brian. The contribution of radio and television to language  
teaching. Visual Education, 9 (1972), 11.

Hill, Brian. UK trends in language-teaching broadcasts. Educational  
Broadcasting International, 7:1 (1974), 3-7.

Hughes, John P. Let us stop teaching imaginary languages. Modern  
Language Journal, 32 (1948), 405-410.

Hutchins, John A. Use and frequency of occurrence of verb forms  
in spoken Brazilian Portuguese. Hispania, 58:1 (1975), 59-67.

The Integration of Audio-Visual Aids into the Teaching of Modern  
Languages in the Classroom. Strasbourg: Council of Europe,  
Committee for General and Technical Education, 1972.  
ERIC ED 086 015

Lally, Dale V. Shortwave receivers and the foreign language  
teacher. NALLD Journal, 6:1 (1971), 37-42.

Lieman, Meyer, and David Weiss. Language by telephone. French  
Review, 44:6 (1971), 1113-1114.

Lutz, Dorothea, and Dieter Sixt. Rundfunknachrichten im Unterricht  
(Radio news in teaching). Zielsprache Deutsch, 3 (1973), 127-130.

Michalski, John. News media as a source of German culture in the  
classroom. n.d. ERIC ED 042 382

Mohr, William, and Dale Lally. Teaching German via shortwave  
broadcasts. Modern Language Journal, 57:3 (1973), 119-124.

Morain, Genelle. A megaplan for instruction in cross-cultural  
understanding. In: Howard B. Altman and Victor E. Hanzeli (Eds.),  
Essays on the Teaching of Culture. A Festschrift to Honor  
Howard Lee Nostrand. Detroit: Advancement Press of America,  
1974. 147-164.

Nelson, Robert J. Electronic media in foreign language education:  
A report on applications. French Review, 46:2 (1972), 330-341.

Northeast Conference on the Teaching of Foreign Languages: 1974  
Reports of the Working Committees. Warren C. Born (Ed.).  
Middlebury, Vermont: Northeast Conference, 1974.

Pimsleur, Paul, and Terrence Quinn (Eds.). The Psychology of  
Second Language Learning. London: Cambridge University Press,  
1971.

Popular Electronics. New York: Ziff Davis Publishing Co. (Published monthly. Includes shortwave listening column and quarterly listings of all English-language broadcasts to North America by Richard E. Wood. Subscriptions \$6.98 annually, to Box 2774, Boulder, Colorado 80302.)

Radio Amateur's Handbook. Newington, Connecticut: American Radio Relay League.

Sanders, Carol. The language laboratory: Too much of a good thing? Audio-Visual Language Journal, 11:1 (1973), 21-24.

Schneider, Rudolph. Schwierigkeiten beim Schreiben eines Sprachkurses für Funk oder Fernsehen [Difficulties in writing a language course for radio or television]. Zielsprache Deutsch, 4 (1970), 181-188.

Seigneuret, Jean-Charles. Ici Paris, office de la radio-télévision française. French Review, 46:2 (1972), 350-353.

Shelton, LaRoy R. Short wave, an untapped resource. Hispania, 47:1 (1964), 123-128.

Smith, David G., and Peter A. Baynes. Spanish on local radio--Leicestershire's experiment. Adult Education (London), 42:4 (1969), 226-230.

Taylor, H. Darrel, and John L. Sorenson. Culture capsules. Modern Language Journal, 45:6 (1961), 350-354.

The Teaching of German: Probleme and Methods. Eberhard Reichmann (Ed.). Philadelphia: National Carl Schurz Association, 1970.

Therrian, Melvin G. Learning French via shortwave radio and popular periodicals. French Review, 46:6 (1973), 1119-1124.

Warschauer, Mary Ellen. Foreign language broadcasting. In: Joshua A. Fishman (Ed.), Language Loyalty in the United States. The Hague: Mouton, 1966, 75-91.

Wilkinson, A., and L. Stratta. Listening and the study of spoken language. Educational Review, 25 (1972), 3-20.

Wood, Richard E. Shortwave radio as a teaching aid for German. Die Unterrichtspraxis, 5:1 (1972), 36-41.

World Radio & TV Handbook. Hvidovre, Denmark. (Published annually. Available from Billboard Publications, Inc., 165 W. 46th Street, New York, New York 10036. \$9.95.)

CAL-ERIC/CLL SERIES ON LANGUAGES AND LINGUISTICS

ERIC (Educational Resources Information Center) is a nationwide network of information centers, each responsible for a given educational level or field of study. ERIC is supported by the National Institute of Education of the U.S. Department of Health, Education, and Welfare. The basic objective of ERIC is to make current developments in educational research, instruction, and personnel preparation more readily accessible to educators and members of related professions.

The ERIC Clearinghouse on Languages and Linguistics (ERIC/CLL), one of the specialized clearinghouses in the ERIC system, is operated by the Center for Applied Linguistics. ERIC/CLL is specifically responsible for the collection and dissemination of information in the general area of research and application in languages, linguistics, and language teaching and learning.

In addition to processing information, ERIC/CLL is also involved in information synthesis and analysis. The Clearinghouse commissions recognized authorities in languages and linguistics to write analyses of the current issues in their areas of specialty. The resultant documents, intended for use by educators and researchers, are published under the title CAL-ERIC/CLL Series on Languages and Linguistics. The series includes practical guides for classroom teachers, extensive state-of-the-art papers, and selected bibliographies.

The material in this publication was prepared pursuant to a contract with the National Institute of Education, U.S. Department of Health, Education, and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their judgment in professional and technical matters. Prior to publication, the manuscript was submitted to the American Council on the Teaching of Foreign Languages for critical review and determination of professional competence. This publication has met such standards. Points of view or opinions, however, do not necessarily represent the official view or opinions of either the American Council on the Teaching of Foreign Languages or the National Institute of Education.

This publication will be announced in the ERIC monthly abstract journal Resources in Education (RIE) and will be available from the ERIC Document Reproduction Service, Computer Microfilm International Corporation, P.O. Box 190, Arlington, Virginia 22210. See RIE for ordering information and ED number.

For further information on the ERIC system, ERIC/CLL, and the CAL-ERIC/CLL information series, write to ERIC Clearinghouse on Languages and Linguistics, Center for Applied Linguistics, 1611 North Kent Street, Arlington, Virginia 22209.

OTHER TITLES IN THIS SERIES

1. Preparing and Using Self-Teaching Units for Foreign Languages,  
by Gerald E. Logan, 1974. Available from ERIC Document  
Reproduction Service (EDRS): ED 098 808.
2. A Selected Bibliography on Bilingual/Bicultural Education,  
by James W. Ney and Donella K. Eberle, 1975. Available  
from EDRS: ED 098 813.
3. A Selected Bibliography on Language Teaching and Learning,  
by Sophia A. Behrens and Kathleen McLane, 1975.  
Available from EDRS: ED 100 189.
4. A Guide to Organizing Short-Term Study Abroad Programs,  
by Paul T. Griffith, 1975. Available from EDRS:  
ED 100 183.
5. Working Papers in Linguistics,  
by Tim Shopen, 1975. Available soon from EDRS.
6. A Selected Bibliography on Mexican American and Native American  
Bilingual Education in the Southwest,  
by Stephen Cahier, Brad Jeffries, and Rosa Montes, 1975.  
Available soon from EDRS.
7. Using Community Resources in Foreign Language Teaching,  
by Stephen L. Levy, 1975. Available soon from EDRS.
8. A Selected Bibliography of Films and Videotapes on Foreign  
Language Teacher Training,  
by Peter A. Eddy, 1975. Available soon from EDRS.
9. ERIC Documents on Foreign Language Teaching and Linguistics:  
List Number 13,  
by Peter A. Eddy, 1975. Available soon from EDRS.
10. Effects of Social Situation on Language Use: Theory and  
Application,  
by William Cheek, Theodore B. Kalivoda, and Genelle Morain,  
1975. Available soon from EDRS.